

What is Claimed is:

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1. A controlled descent device comprising:
- a housing;
- a rotatable drum supported within said housing;
- 5 a line wound around said drum adapted for extraction and retraction from said housing;
- a brake mechanism for engaging said drum to produce a resisting force during line extraction; and
- 10 a manufactured mechanism linking said brake mechanism to said drum for producing a rotational motion in one direction and fixed motion in the opposite direction.
2. The controlled descent device of claim 1 wherein said manufactured mechanism is a one-way bearing.
- 15 *Pub* 3. The controlled descent device of claim 2 wherein said one-way bearing is selected from the group consisting of back stopping, clutch, indexing, ramp type roller, sprag and sprag clutch/roller bearing combinations. *112*
4. The controlled descent device of claim 2 wherein said brake mechanism includes a pinion gear with a shaft supported on said housing, and a brake hub supported on said shaft by said one-way bearing.
5. The controlled descent device of claim 1 wherein the line is constructed of flat webbing. *103*

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linkage comprises a screw lock link passing through the loops.

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13. The controlled descent device of claim 10 wherein each of said joined ends has a loop, wherein said linkage comprises a plate supported within each said loop, and at least one screw passing through the loops and plates.

14. In a controlled descent device including a housing, a rotatable drum supported within said housing, a line wound around said drum adapted for extraction and retraction from said housing, a brake mechanism for engaging said drum to produce a resisting force during line extraction; wherein the improvement comprises a manufactured mechanism linking said brake mechanism to said drum for producing a rotational motion in one direction and fixed motion in the opposite direction.

15. The controlled descent device of claim 14 wherein said manufactured mechanism is a one-way bearing.

16. The controlled descent device of claim 15 wherein said one-way bearing is selected from the group consisting of back stopping, a clutch, indexing, roller ramp type, sprag and sprag clutch/roller bearing combinations.

17. A controlled descent device comprising:

a housing;

a rotatable drum supported within said housing;

a line wound around said drum adapted for extraction and retraction from said housing;

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